

Formatted Question Paper

Q1) Explain the significance of containerization in modern software development. [3 Marks]

- (a) Define containerization and its key components. (Remembering, 2 Marks)
- (b) Discuss the benefits of using containers over traditional virtual machines. (Understanding, 3 Marks)

Question2) Define the process of developing a machine learning model. [5 Marks]

- (a) Outline the main stages involved in building a machine learning model. (Applying, 3 Marks)
- (b) Provide examples of datasets that can be used for model training. (Understanding, 2 Marks)

Q-3) Analyze the impact of data visualization on decision-making in organizations. (10 Marks)

- (a) Explain the concept of data visualization. (Understanding, 4 Marks)
- (b) Evaluate how data visualization aids in strategic decisions. (Analyzing, 6 Marks)

Question4) Compare and contrast the Agile and Waterfall methodologies in software development. [8 Marks]

- (a) Describe the Agile methodology. (Remembering, 3 Marks)
- (b) Compare Agile and Waterfall with respect to project flexibility. (Evaluating, 5 Marks)

Q5) Explain a simple database schema for a library management system. (7 Marks)

- (a) List the key entities and their attributes in a library system. (Applying, 3 Marks)
- (b) Draw an ER diagram based on the entities identified. (Creating, 4 Marks)